

Amendments to the Specification:

Please insert the following heading and paragraph on page 3, line 3:

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1(a) is a schematic block diagram of an arc welding robot according to an embodiment of the invention.

Fig. 1(b) is a schematic block diagram of a welding part according to the embodiment of the invention, explaining its connecting state with its associated parts.

Fig. 2 is an explanatory view of an example of an operation program of the arc welding robot according to the embodiment of the invention.

Fig. 3 is an explanatory view of an example of a format of recording data according to the embodiment of the invention.

Fig. 4 is an explanatory view of an example of a screen to be displayed by display means according the embodiment of the invention.

Fig. 5 is an explanatory view of an example for displaying waveform data on the display means in the form of a graphical representation according to the embodiment of the invention.

Fig. 6 is an explanatory view of an example of a screen for selecting either the transfer of the waveform data to external memory or the display thereof as a graphical representation according to the embodiment of the invention.

Please replace paragraph [0011] with the following amended paragraph:

109 designates an external memory or portable memory means (for example, a semiconductor memory card or a small-size hard disk) removably connected to the teach pendant 108 for storing an operation program and setting data taught by an operator, 103 a CPU for controlling the control unit itself, 104 a welding control part for controlling a welding operation,

105 a ROM for storing the software of the control unit, the software being interpreted by the CPU for operation, 106 a RAM for storing the operation program and setting data taught by the operator, and 107 a drive part for driving the manipulator 101.

Please replace paragraph [0019] with the following amended paragraph:

The recording process is executed under the control of the CPU 103: that is, the data is read out from the welding control part 104 and is transferred to and recorded in the RAM 106.

Please replace paragraph [0029] with the following amended paragraph:

In this example, the sampling cycle is 500ms; a welding instruction current value (shown by a solid line) applied to the welding control part 104 and an actual welding current value (shown by a broken line) detected by the welding control part 104 are shown in the upper part of the graphical representation; a welding instruction voltage value (shown by a solid line) applied to the welding control part 104 and an actual welding voltage value (shown by a broken line) detected by the welding control part 104 are shown in the lower part of the graphical representation; and, the respective teach points P1 - P3 and the timings of the respective operation programs Prog0001, Prog0002 are shown in the horizontal axis direction.

Please replace paragraph [0033] with the following amended paragraph:

Also, in the above-mentioned embodiment, as the display means thereof, there are used the liquid crystal display screen (not shown) of the teach pendant 108 and the drive means (not shown) of the teach pendant 108. However, the invention is not limited to this but, in the control unit 102, there may also be provided display means separately.

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Please delete the heading “BRIEF DESCRIPTION OF THE DRAWINGS” and paragraph [0035], starting on page 7, line 28 and ending on page 8, line 13.

Please delete the heading “DESCRIPTION OF REFERENCE CHARACTERS” and paragraph [0036], starting on page 8, line 14 and ending on page 8, line 21.